

## ABSTRACT OF THE DISCLOSURE

An analog/digital modulation type discrimination circuit 1 discriminates whether a reception signal is an analog modulation type, a linear modulation type or a non-linear modulation type by digital modulation type. In case where the reception signal is discriminated to be the analog modulation type, an analog modulation type discrimination circuit 2 discriminates whether it is an AM signal or an FM signal among the analog modulation type. In case where the reception signal is discriminated to be the linear modulation type by digital modulation type, a linear modulation type discrimination circuit 3 discriminates whether it is a BPSK signal, a QPSK signal, a  $\pi/4$ -shift QPSK signal, an 8-PSK signal, an M-ary PSK signal of multi-level exceeding 8-levels, a 16 QAM signal or an M-ary QAM signal of multi-level exceeding 16-levels among the linear modulation type by digital modulation type. In case where the reception signal is discriminated to be the non-linear modulation type by the digital modulation type, a non-linear modulation type discrimination circuit 4 discriminates whether it is an M-ary FSK signal, a 2-FSK signal, an MSK signal or a GMSK signal among the non-linear modulation type by the digital modulation type.

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